

La Vista Junior High School



2011 SAME / SMP Written Proposal

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LEO A DALY

Project Title: **New Face on 84th**

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Avery Hardy	8	Jacobbie Mengel	8
Adrian Wacker	8	Nik Strehle	8
		Josh Wilson	8

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Project Problem Statement:

Our first problem is the traffic congestion around La Vista Jr High, when students are being dropped off in the morning or picked up in the afternoon. The traffic jams get all the way to Giles Road. The traffic at LVJH during the beginning and end of school hours is slow and not very efficient. We want to make it so that when students arrive at school their parents are able to drop their kids off and leave for work quickly. The traffic slow down gets worse in the winter. The snow and ice make roads slick, causing the traffic issue to become even worse. Roads are covered in snow and ice, which causes cars to slip and slide making traffic even slower, causing kids to be ten to fifteen minutes late to school. If we do not find a solution, the traffic could go even past 84th Street and could cause accidents to happen.

Our project is to solve the traffic problem in our area before school and after school. The traffic problem is causing kids to be late to school and parents to be late to work. You can identify the problem by witnessing it every day before and after school. Other people who don't go to this school on a daily basis, have also complained about the traffic problem.

The teachers and kids of LVJH and their parents would be the ones to benefit from this the most. If this problem is solved. The kids won't be late to their first hour class and there parents can go to work on time. If we can solve the traffic problem, this could save on the amount of carbon monoxide in the area, causing a better environment.

Another problem is that we are built on a hill, so we are limited to space. Local situation that is cause by the location of the school because of the limited space to expand the parking lot.

They are affected because the kids need to go to school and there parents are there main way to get to and from school.

Our second problem is that there is an empty Wal-Mart that no one has plans for. There is a problem with leaving a vacant building in the middle of a growing city. There have been requests by residents in the city for a place to hang out at a water park type place. We think we can address these two issues with the plan we have to present.

Research Completed:

1. Traffic Problem

To research the problem we did a traffic count and a question and answer survey. We witness the traffic problem every day before and after school. There are other people who don't go to this school on a daily basis, and also complain about the traffic problem. Our research involved counting cars on two separate mornings, and gathering survey answers from a random selection of 15% of the school population. The results of our studies are summarized using graphical methods and statistical analysis.



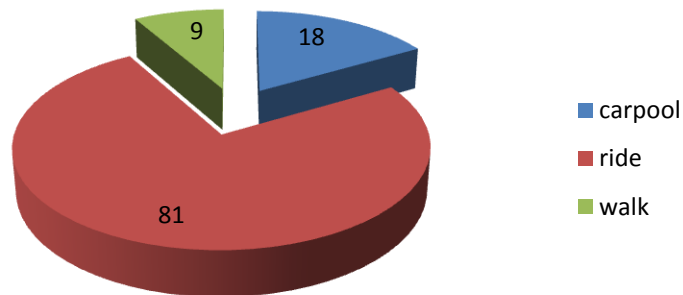
La Vista Junior High Traffic Survey

This survey is being conducted so that the engineers at LVJH can figure out a way to make our traffic system more efficient for the students.

How do you get to school *

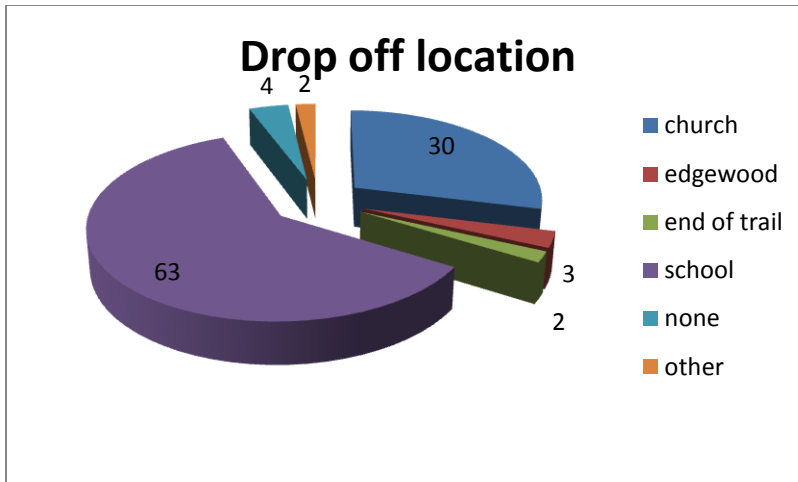
- ☒ Walk
- ☐ Ride with a parent/guardian
- ☐ Carpool
- ☐ Other:

How students get to school



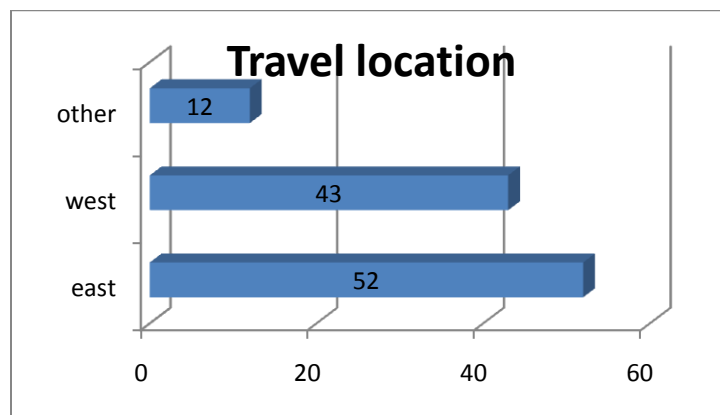
If you Drive/carpool, where do you get dropped off at? *

- ☐ In front of the school
- ☐ On Edgewood (street that the school branches off of)
- ☐ Dropped off at another location
- ☐ The Church parking lot
- ☐ I don't drive to school
- ☐ Other:

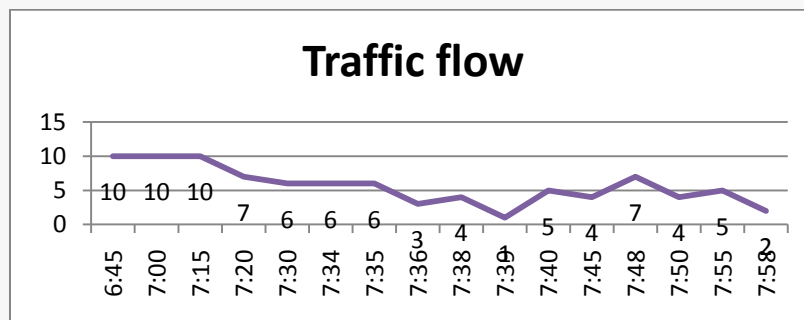


Where do you live? *

- ☐ East of 84th Street (by the new Wal-Mart)
- ☐ West of 84th Street (by No Frills and target)
- ☐ I don't know



About what time do you come to school in the morning? *



When you arrive at school would you say that the traffic is moving very quickly or not moving at all? * (grade on a 1 to 10 scale. 1 being not moving at all and 10 being moving very quickly)

If you could change anything about the traffic what would it be, please explain. *

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2. Vacant Walmart Building

We researched what people wanted and what the city planned to do with this vacant space. We reviewed the ideas listed in Vision 84's modernizing of the city in the same area we were looking at, right next to our school. The city is planning to tear down the existing building and build something else in its place, but we would like to persuade them to leave the building and use our ideas.

If we recycle the building and recycle water used in the building, there will be no unnecessary destruction and unwanted waste. Plus the ground around the new planned waterpark will not be disturbed or destroyed. As you can probably predict we are environmentally friendly.

With the survey we pulled from Vision 84, a lot of people wanted a swimming pool. This will grant their wishes. The clients will be the citizens of Papillion and La Vista. The people who will mostly want to go to this park are children and young adults 8 to 20 years of age.

If the citizens wanted a new water park, then this will give them a park to go to, and to place to spend parts of their year. This would improve current conditions by taking an "eyesore" (from vision 84 survey) and turning it into a community and tourist attraction.

This idea originated from a survey that was given to us by Vision 84, a study by the City of La Vista. The people wanted a pool and no one was doing anything, so we decided to give them a water park. This was only influenced by our group's minds and there were no outside ideas pointing us in this direction, other than the survey.

We also reviewed the results of the survey to determine what kinds of things the people wished for from the city survey. We then brainstormed all kinds of ideas we could transform the inside of the WalMart building into. Since many people wanted a place to hang out, or exercise, we decided to plan several recreation type areas inside the building, and create the water park in the existing empty parking lot space and area outside of the vacant building.



Recommendations (Project Solution)

1. Traffic Recommendations

Other alternatives we considered were to expand traffic lanes on school property, expand parking lot around the school, and construct parking lots at the football fields.

Our recommendation is to make the entrance and exit lanes bigger and wider, and requiring certain people go to the church, if they live in a certain area and make the other people get dropped off at the school if they live in a certain area.

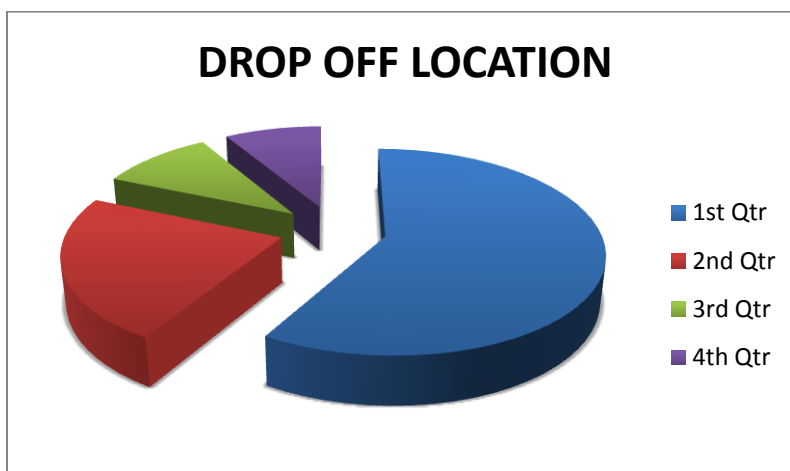
Our solution is to expand the Wal-mart parking lot closer to our school. It also calls for a wider sidewalk and a rain cover. The sidewalk can have two people walking the same way or two people walking opposite ways. People living west of 84th street can be dropped off at this new parking lot, while people living east of 84th can be dropped off at the school.

We plan to have thick concrete that ensures that we will not have to patch it up for ten to twenty years. If we use bad concrete, we will have to patch it up every five years. Our plan is to pay a lot now and pay less later rather than pay little by little over a long period of time. The price of new paving will be about \$300,000. This is worth the money because this will satisfy the needs of the kids, parents, teachers and pedestrians of the city.

This solution will be safer than the current traffic condition. The safety of the student body will be affected because it will keep students who walk safer, by reducing traffic around the building.

Our solution is a cheaper alternative, than some other possibilities, and would save the tax payers money. It could help kids come together and start a carpool system. If we can get traffic to be more efficient we won't have any stop and go traffic, which will help the environment, due to the

smaller amounts of smog in the air. There would be very little effect politically by implementing our solution. However any effect would be beneficial to the community of La Vista Junior High School.



Workflow would affect the students very little because the proposed site is located off campus. Also, the proposed construction would have little effect on the surrounding properties, because they are mostly vacant.

Any effect would be beneficial to the community of La Vista Junior High School, as it should lessen the traffic flow problem. The humans that are affected are mainly from La Vista Junior High School. The timing of our project would be immediate because it is a present problem, currently encountered by students.

2. Vacant Walmart Building

Our group was all interested in the topic of a water park and they thought that La Vista and Papillion would both be interested in that too. This belief was reinforced by the survey done by the city of La Vista in 2008.

The water park and transformed Wal-Mart will bring many visitors to La Vista and maybe make it one of those places people say “lets go there for our vacation”. La Vista should get a nice income from this building. The Wal-Mart could become a great place to meet people and make friends. It could also make a great place to have a party.

The transformed Wal-Mart will be powered by solar energy. The solar panels will act as a roof and be shaped as a triangle type roof to absorb energy from both the setting sun and the rising one as well. The building will most likely cost in the millions and would be a large risk for any company to invest in. Investing in any new project would be a major risk for any investor. We think that it would be a worthwhile investment in the long run though.

Team Organization

Design Teams

Team Member	Strengths	Design Team	Project Assignment
Zach	Science, Engineering and Design	WalMart Renovation	Written Report and Sustainability/Research
Collin	Far Out Ideas	WalMart Renovation	Sustainability/Research
Josh	Experience Math and Science	WalMart Renovation	Develop Sketch Up – WalMart Plan
Trey	Technology	WalMart Renovation	Develop Sketch Up – WalMart Plan
Adrian	Math and Science	WalMart Renovation	Analyze Data From Traffic Survey / Written Report
Allen	Brainstorming ideas	Traffic Flow Problem	Analyze Data From Traffic Survey / Written Report
Jacobbie	Experience Math	Traffic Flow Problem	Develop Diagram or Model for Traffic Flow
Avery	Math & Science	Traffic Flow Problem	Develop Diagram or Model for Traffic Flow
Nik	Math, Building Stuff	Traffic Flow Problem	Written Report

Josh was the head of a SketchUp design for the outside area surrounding the former Wal-Mart building. Trey was in charge of designing some of what would go inside the building. Both Josh and Trey are using the design program to provide a preview of what could be put in our waterpark, and gym areas, including the names of each object/space and the dimensions. Colin researched and typed up the details for the Wal-Mart problem and solution. Zach researched ways to make the project more sustainable. He also determined cost estimates for the underground arcade. Avery brainstormed various solutions to both problems, was involved in the traffic data collection, and helped pull the writing together. Jacobbie wrote the survey, helped gather traffic data, and will pull together the PowerPoint to use in the presentation at the end of the month. Allen analyzed the traffic problem and data collected, and helped brainstorm possible solutions. Nik worked to pull information together for the traffic problem and written proposal.

Adrian analyzed the data from the student survey and worked on writing the team information on the written proposal. Most team members were in charge of completing parts of the written proposal in order to prepare to turn it in on April 1st.

Each student brought a different trait to the team. Everyone had a different point of view and with those different ideas and views, we could pull them together to create one huge plan. We split into small teams because we had two problems to work on. Each student brought useful information to their part in order to finish it. Certain kids on each team matched what needed to be done. They all had experience in what they were helping with.

We worked as a team in each part. A big thing that helped us and brought us together was the workshop at PKI. We also brought all our information together such as traffic flow, water park styles and many math objectives. With each member having their own objective we were able to bring these together to finish this project. Serious working and enjoying each others help, made it possible to accomplish our goal.

Process Description (Journey Documentation)

Our projects took a lot of work to accomplish. We would meet every Thursday, after school. At each meeting we would discuss how we could make our community a better place. We would get different handouts of the Wal-Mart building and Google Earth images of are school to help us brainstorm possible solutions to our problems.

We choose a bigger task of having two problems in one report. Another way we figured out on “The City of La Vista, Nebraska : Report of Open-Ended Question 2008”

Lessons Learned

Next time we should focus on one problem, and break it up so that we can get more done. We also needed to find time to think about our project between each of our weekly meetings. It was hard to find time to get the work done on the project outside of our regular school assignments.

Acknowledgements

City of La Vista city planners presented to us the development plan for our area of concern. This plan was produced by a land development firm.

Bibliography

The City of La Vista, Nebraska Report of Open-ended Question 2008 <http://www.ci.la-vista.ne.us/DocumentView.aspx?DID=1141>

The Great Wolf Lodge, Coco Keys, and King's Pointe <http://maps.google.com/>